Cumulative Index

Volumes 40-49 (Fall 1980 - Spring 1990)

Citations are given as Volume-Number:Page.
Authors are students unless indicated by (F) for "faculty."

Author Index

Albers, John, *An Application of Linear Algebra*, 47-2:20.

Allen, Michael R., *The Probabilities of a Craps Game*, 49-1:15.

Amir-Moez, Ali R. (F), *"Et Cetera" in Mathematics*, 42-2:110.

Andrews, Susan L., *Shannon's Theorem for Entropy and its use in the Huffman Coding Procedure*, 45-1:54.

Antos, Damon, *Game Playing and Artificial Intelligence*, 44-2:133.

Barlow, Richard Lee (F), *[Cannibal-Missionary Problems]*, 41-2:128.

Barlow, Richard Lee (F), *[Computer generated random numbers]*, 40-1:47.

Barlow, Richard Lee (F), *[Numerous classical mathematical puzzles]*, 42-1:45.

Barlow, Richard Lee (F), *[Older Mathematical Textbooks]*, 40-2:115.

Barlow, Richard Lee (F), *[Prime Number Grids]*, 41-1:44.

Baskins, Lori, *Homothetic Proof of the Nine-Point Circle*, 46-2:71.

Bishop, C. David, *Three Dimensional Hyperbolic Geometry: An Exposition*, 48-2:2.

Bly, Theresa, *Can You Hear the Shape of a Tambourine?* 49-2:3.

Bogia, Douglas P., *An Application of Linear Interpolation in Two Variables for Brain Wave Displays*, 45-1:2.

Bowden, Cynthia B., *The Mathematics of Musical Scales*, 43-2:99.

Breaker, Melanie K., *NP-Completeness and The Traveling Salesman*

Cumulative Index

Volumes 40-49 (Fall 1980 - Spring 1990)

Citations are given as Volume-Number:Page.
Authors are students unless indicated by (F) for "faculty."

Author Index

Albers, John, *An Application of Linear Algebra*, 47-2:20.

Allen, Michael R., *The Probabilities of a Craps Game*, 49-1:15.

Amir-Moez, Ali R. (F), *"Et Cetera" in Mathematics*, 42-2:110.

Andrews, Susan L., *Shannon's Theorem for Entropy and its use in the Huffman Coding Procedure*, 45-1:54.

Antos, Damon, *Game Playing and Artificial Intelligence*, 44-2:133.

Barlow, Richard Lee (F), *[Cannibal-Missionary Problems]*, 41-2:128.

Barlow, Richard Lee (F), *[Computer generated random numbers]*, 40-1:47.

Barlow, Richard Lee (F), *[Numerous classical mathematical puzzles]*, 42-1:45.

Barlow, Richard Lee (F), *[Older Mathematical Textbooks]*, 40-2:115.

Barlow, Richard Lee (F), *[Prime Number Grids]*, 41-1:44.

Baskins, Lori, *Homothetic Proof of the Nine-Point Circle*, 46-2:71.

Bishop, C. David, *Three Dimensional Hyperbolic Geometry: An Exposition*, 48-2:2.

Bly, Theresa, *Can You Hear the Shape of a Tambourine?* 49-2:3.

Bogia, Douglas P., *An Application of Linear Interpolation in Two Variables for Brain Wave Displays*, 45-1:2.

Bowden, Cynthia B., *The Mathematics of Musical Scales*, 43-2:99.

Breaker, Melanie K., *NP-Completeness and The Traveling Salesman*

Problem, 48-2:35.

Bressoud, Thomas C., *Fun with Splines*, 42-2:85.

Brox, Lisa D., *Computational Complexity*, 48-2:15.

Calhoun, Jim (F), *Mathematical Induction, Sets and Programs*, 44-1:44.

Carpenter, Janet, *Genetic Probabilities*, 41-2:95.

Chartier, Kevin, *The Rain, I Claim, Falls Mainly on the Brain*, 49-1:3.

Chasen, Lee, *Pattern Duplication and Reflection: A Bouncing Ball Problem*, 49-2:16.

Cicero, John A. (F) and James M. Meehan (F), *A Mathematical and Simulation Model of a Computer Communication Network*, 47-1:46.

Darai, Abdollah (F), *On General Solutions of Linear Homogeneous Recurrence Relations*, 47-1:37.

Dettmann, Darla, *The Eight Point Circle*, 40-2:96.

Ecker, Michael W. (F), *Some Recreational Applications of Elementary Number Theory*, 41-2:135.

Eisenbarth, Kelly, *From Alice to Algebra*, 46-2:93.

Elderbrock, Lisa K., *Finding Positive Integral Solutions to Linear Diophantine Equations*, 45-2:114.

Filman, Robert E. (F), *Computers and Chess*, 41-1:51.

Fleissner, Richard (F), *What is a Picture Worth?* 40-2:123.

Fox, David L., *Mersenne Primes, the 27th Mersenne Prime and the Cray-1 Computer*, 40-2:88.

Garces, Connie J., *The Knight's Tour: The Mathematics behind an Old Problem and Its New Implementation*, 47-1:2.

Gibson, Richard, *Modest Numbers, A Mathematical Excursion*, 44-2:95.

Haddad, Deanna, *Graph Coloring*, 46-1:2.

Hamilton, Hans and Kent Harris (F), *The Eight Queens Problem*, 41-1:66.

Harris, David, *Computer Graphics: Three Dimensional Representation of Spheres*, 41-1:1.

Harris, Kent (F) and Hans Hamilton, *The Eight Queens Problem*, 41-1:66.

Hauenstein, Erich Laurence, *A Brief Introduction to the Principle of Inclusion and Exclusion*, 48-1:32.

Heier, Nancy A., *When is a Lattice a Lattice?* 40-1:3.

Herz, Annette, *The Fibonacci Numbers*, 41-1:12.

Hirsch, Patrick J., *As the Water Swirls*, 47-2:2.

Hoare, Tony, *Inside every Large Problem is a Small Problem Struggling to Get Out*, 43-2:138.

Ingrassia, Michael (F), *Can You Capture Infinity with a Short Axiom?* 42-1:51.

Kalantari, Iraj (F), *[Holmes, Watson and Logic]*, 40-1:53.

Kalantari, Iraj (F), *[An Unsolved Problem]*, 44-2:129.

Kelly, Susan E., *"Christ at Emmaus:" A Vermeer Masterpiece or a Van Meegeren Forgery?* 44-2:79.

Kerley, Lyndell M. (F), *An Application of the Newton-Raphson Method*, 47-2:33.

Kranjc, Marko (F), *Vector Fields and the Euler Characteristic*, 45-2:142.

Lakins, Tamara Jane, *Turing's Test: "Can Machines Think?"* 43-2:122.

Lawyer, Michele Ann, *An Application of Graph Theory*, 48-1:14.

Leinbach, L. Carl (F) and Alex L. Wijesinha (F), *Reducing Recursive Calls*, 45-2:152.

Lightner, James E. (F), *Excerpts from Dr. Lightner's Banquet Address "A Look Back over Fifty Years,"* 40-2:169.

Livingston, William R. (F), *Motions and Matrices*, 48-1:44.

Lutz, Kimberly A., *The Chinese Remainder Theorem*, 46-1:14.

Meehan, James M. (F) and John A. Cicero (F), *A Mathematical and Simulation Model of a Computer Communication Network*, 47-1:46.

Melvin, Timothy J., *Old and New Results Concerning Amicable Pairs*, 47-1:20.

Mok, Dennis (F), *Performance Analysis of Computer Systems*, 46-1:36.

Muckey, Mary Jo, *Knot Theory with Topology*, 45-2:105.

Naccache de Paz, David, *A Note about* $\sum_{k=1}^{n} k^m k!$ 49-2:10.

Oganovich, Deborah, *The Plowshare Problem*, 40-1:16.

Paulson, Susan, *Underwater Mathematical Modeling*, 49-1:26.

Pirzadeh, Behrooz, *Mathematical Induction and Guessing*, 41-1:27.

Rademaker, William W., *Inward Spirals in Turtle Geometry*, 46-2:79.

Renegar, Sherri L., *Axiomatic Structure of the Integral*, 49-2:22.

Ribas, Roberto A., *The Nude Numbers*, 45-1:18.

Sandman, Donald D., *Tessellations*, 40-1:29.

Schaaf, William L. (F), *Edmund Halley on Life Tables*, 44-1:2.

Shannon, Thomas S., *The Divisibility of Seven and Other Numbers*, 44-1:11.

Shorter, Janet and F. Max Stein (F), *Pascal's Tetrahedron and the Trinomial Coefficients*, 42-1:19.

Siems, Steven T., *Some Comments on 1/sin x and 1/x on (0, π/2]*, 43-2:86.

Siler, Joseph, *A Metric Characterization of the Betweenness Relation*, 42-1:13.

Sodergren, Steven Daniel, *On the Irrationality of e*, 45-2:100.

Stein, F. Max (F) and Janet Shorter, *Pascal's Tetrahedron and the Trinomial Coefficients*, 42-1:19.

Strachen, Diane, *Spherical Trigonometry*, 48-1:2.

Tanaka, Forrest Y., *Fractals: The Mandelbrot Set*, 46-2:118.

Vakil, Nader (F), *What is Internal Set Theory?* 49-2:30.

Ward, Jayne, *History of the 5th Postulate*, 41-2:106.

Weitkamp, Galen (F), *Infinite Games Immortals Play*, 45-1:42.

Weitkamp, Galen (F), *An Unplayable Game*, 43-1:43.

Welch, Lawrence (F), *Alan in Computerland*, 42-2:128.

Wijesinha, Alex L. (F) and L. Carl Leinbach (F), *Reducing Recursive Calls*, 45-2:152.

Wilkinson, Ross (F), *Do You Believe in Pythagorus?* 44-1:33.

Woodard, Mark R., *Amicable Numbers*, 43-1:2.

Yarnall, Kimberly, *Catalan Numbers*, 42-1:1.

Zbiek, Rose Mary, *What can we say about the Duffinian Numbers?* 42-2:99.

Zebraitis, Nancy, *Constructing Efficient Codes*, 43-1:15.

Title Index

Alan in Computerland. Lawrence Welch (F), 42-2:128.

Amicable Numbers. Mark R. Woodard, 43-1:2.

An Application of Graph Theory. Michele Ann Lawyer, 48-1:14.

An Application of Linear Algebra. John Albers, 47-2:20.

An Application of Linear Interpolation in Two Variables for Brain Wave Displays. Douglas P. Bogia, 45-1:2.

An Application of the Newton-Raphson Method. Lyndell M. Kerley (F), 47-2:33.

As the Water Swirls. Patrick J. Hirsch, 47-2:2.

Axiomatic Structure of the Integral. Sherri L. Renegar, 49-2:22.

A Brief Introduction to the Principle of Inclusion and Exclusion. Erich Laurence Hauenstein, 48-1:32.

Can You Capture Infinity with a Short Axiom? Michael Ingrassia (F), 42-1:51.

Can You Hear the Shape of a Tambourine? Theresa Bly, 49-2:3.

[Cannibal-Missionary Problems]. Richard Lee Barlow (F), 41-2:128.

Catalan Numbers. Kimberly Yarnall, 42-1:1.

The Chinese Remainder Theorem. Kimberly A. Lutz, 46-1:14.

"Christ at Emmaus:" A Vermeer Masterpiece or a Van Meegeren Forgery? Susan E. Kelly, 44-2:79.

Computational Complexity. Lisa D. Brox, 48-2:15.

[Computer generated random numbers]. Richard Lee Barlow (F), 40-1:47.

Compute Graphics: Three Dimensional Representation of Spheres. David Harris, 41-1:1.

Computers and Chess. Robert E. Filman (F), 41-1:51.

Constructing Efficient Codes. Nancy Zebraitis, 43-1:15.

The Divisibility of Seven and Other Numbers. Thomas S. Shannon, 44-1:11.

Do You Believe in Pythagorus? Ross Wilkinson (F), 44-1:33.

Edmund Halley on Life Tables. William L. Schaaf (F), 44-1:2.

The Eight Point Circle. Darla Dettmann, 40-2:96.

The Eight Queens Problem. Hans Hamilton and Kent Harris (F), 41-1:66.

"Et Cetera" in Mathematics. Ali R. Amir-Moez (F), 42-2:110.

Excerpts from Dr. Lightner's Banquet Address "A Look Back over Fifty Years." James E. Lightner (F), 40-2:169.

The Fibonacci Numbers. Annette Herz, 41-1:12.

Finding Positive Integral Solutions to Linear Diophantine Equations. Lisa K. Elderbrock, 45-2:114.

Fractals: The Mandelbrot Set. Forrest Y. Tanaka, 46-2:118.

From Alice to Algebra. Kelly Eisenbarth, 46-2:93.

Fun with Splines. Thomas C. Bressoud, 42-2:85.

Game Playing and Artificial Intelligence. Damon Antos, 44-2:133.

On General Solutions of Linear Homogeneous Recurrence Relations. Abdollah Darai (F), 47-1:37.

Genetic Probabilities. Janet Carpenter, 41-2:95.

Graph Coloring. Deanna Haddad, 46-1:2.

History of the 5th Postulate. Jayne Ward, 41-2:106.

[Holmes, Watson and Logic]. Iraj Kalantari (F), 40-1:53.

Homothetic Proof of the Nine-Point Circle. Lori Baskins, 46-2:71.

Infinite Games Immortals Play. Galen Weitkamp (F), 45-1:42.

Inside every Large Problem is a Small Problem Struggling to Get Out. Tony Hoare, 43-2:138.

Inward Spirals in Turtle Geometry. William W. Rademaker, 46-2:79.

On the Irrationality of e. Steven Daniel Sodergren, 45-2:100.

The Knight's Tour: The Mathematics behind an Old Problem and Its New Implementation. Connie J. Garces, 47-1:2.

Knot Theory with Topology. Mary Jo Muckey, 45-2:105.

Mathematical Induction and Guessing. Behrooz Pirzadeh, 41-1:27.

Mathematical Induction, Sets and Programs. Jim Calhoun (F), 44-1:44.

A Mathematical and Simulation Model of a Computer Communication Network. John A. Cicero (F) and James M. Meehan (F), 47-1:46.

The Mathematics of Musical Scales. Cynthia B. Bowden, 43-2:99.

Mersenne Primes, the 27th Mersenne Prime and the Cray-1 Computer. David L. Fox, 40-2:88.

A Metric Characterization of the Betweenness Relation. Joseph Siler, 42-1:13.

Modest Numbers, A Mathematical Excursion. Richard Gibson, 44-2:95.

Motions and Matrices. William R. Livingston (F), 48-1:44.

A Note about $\sum_{k=1}^{n} k^m k!$ David Naccache de Paz, 49-2:10.

NP-Completeness and The Traveling Salesman Problem. Melanie K. Breaker, 48-2:35.

The Nude Numbers. Roberto A. Ribas, 45-1:18.

[Numerous classical mathematical puzzles]. Richard Lee Barlow (F), 42-1:45.

Old and New Results Concerning Amicable Pairs. Timothy J. Melvin, 47-1:20.

[Older Mathematical Textbooks]. Richard Lee Barlow (F), 40-2:115.

Pascal's Tetrahedron and the Trinomial Coefficients. Janet Shorter and F. Max Stein (F), 42-1:19.

Pattern Duplication and Reflection: A Bouncing Ball Problem. Lee Chasen, 49-2:16.

Peace Corps Announcement. 46-1:67.

Performance Analysis of Computer Systems. Dennis Mok (F), 46-1:36.

The Plowshare Problem. Deborah Oganovich, 40-1:16.

PME Celebrates Diamond Jubilee. 49-1:35.

[Prime Number Grids]. Richard Lee Barlow (F), 41-1:44.

The Probabilities of a Craps Game. Michael R. Allen, 49-1:15.

The Rain, I Claim, Falls Mainly on the Brain. Kevin Chartier, 49-1:3.

Reducing Recursive Calls. L. Carl Leinbach (F) and Alex L. Wijesinha (F), 45-2:152.

Shannon's Theorem for Entropy and its use in the Huffman Coding Procedure. Susan L. Andrews, 45-1:54.

Some Comments on 1/sin x and 1/x on (0, π/2]. Steven T. Siems, 43-2:86.

Some Recreational Applications of Elementary Number Theory. Michael W. Ecker (F), 41-2:135.

Spherical Trigonometry. Diane Strachen, 48-1:2.

Tessellations. Donald D. Sandman, 40-1:29.

Thank You Hewlett-Packard! 49-1:61.

Three Dimensional Hyperbolic Geometry: An Exposition. C. David Bishop, 48-2:2.

Turing's Test: "Can Machines Think?" Tamara Jane Lakins, 43-2:122.

Underwater Mathematical Modeling. Susan Paulson, 49-1:26.

An Unplayable Game. Galen Weitkamp (F), 43-1:43.

[An Unsolved Problem]. Iraj Kalantari (F), 44-2:129.

Vector Fields and the Euler Characteristic. Marko Kranjc (F), 45-2:142.

What can we say about the Duffinian Numbers? Rose Mary Zbiek, 42-2:99.

What is a Picture Worth? Richard Fleissner (F), 40-2:123.

What is Internal Set Theory? Nader Vakil (F), 49-2:30.

When is a Lattice a Lattice? Nancy A. Heier, 40-1:3

Continuing Sections

The Cursor: 43-2:138, 44-1:44, 44-2:133, 45-1:54, 45-2:152, 46-1:36, 47-1:46, 47-2:33.

The Hexagon: 40-1:53, 40-2:123, 41-1:51, 41-2:134, 42-1:50, 42-2:128, 43-1:42, 43-2:121, 44-1:32, 44-2:129, 45-1:41, 45-2:142, 47-1:36, 49-2:29.

In Memoriam: Carl V. Fronabarger, 48-2:82; Louise Stokes Hunter, 48-2:82.

Installation of New Chapters: Illinois Theta (18 May 1979), 40-1:84; New

York Lambda (2 May 1983), 43-1:83; Texas Theta (25 April 1980), 40-1:83.

Kappa Mu Epsilon News: 40-1:62, 40-2:136, 41-1:75, 41-2:143, 42-1:61, 42-2:143, 43-1:60, 43-2:151, 44-1:59, 44-2:145, 45-1:71, 45-2:162, 46-1:47, 46-2:142, 47-1:61, 47-2:38, 48-1:68, 48-2:65, 49-1:43, 49-2:49.

The Mathematical Scrapbook: 40-1:47, 40-2:115, 41-1:44, 41-2:128 , 42-1:45.

The Problem Corner: 40-1:36, 40-2:106, 41-1:34, 41-2:120, 42-1:34, 42-2:118, 43-1:33, 43-2:112, 44-1:22, 44-2:113, 45-1:32, 45-2:129, 46-1:26, 46-2:132, 47-1:29, 47-2:26, 48-1:59, 48-2:57, 49-1:36, 49-2:40;

Problems (#:V-N): 327-331:40-1, 332-336:40-2, 337-341:41-1, 342-346:41-2, 347-351:42-1, 352-356:42-2, 367-371:43-1, 372-376:43-2, 377-381:44-1, 382-386:44-2, 387-391:45-1, 392-396:45-2, 397-401:46-1, 402-405:46-2, 403 (corrected): 47-2, 406-409:47-1, 410-413:47-2, 414-418:48-1, 420-424:48-2, 425-429:49-1, 430-434:49-2;

Solutions (#:V-N): 317-321:40-1, 322-326:40-2, 327-331:41-1, 332-336:41-2, 337-341:42-1, 338 (corrected):42-2, 342-346:42-2, 347-351:43-1, 352-356:43-2, 367-371:44-1, 372-376:44-2, 377-379:45-1, 380:45-2, 381:45-1, 382-384:45-2, 385:46-1, 386:45-2, 387-391:46-1, 392:47-1, 393-396:46-2, 397-399:47-1, 400:47-2, 401:47-1, 402-403:48-1, 404-405:47-2, 406-407:48-1, 408:48-2, 49-1, 409:48-1, 410-413:48-2, 414-418:49-1, 420-421:49-2, 423-424:49-2.

Biennial Conventions (in numerical order):

Twenty-Third: Announcement, 40-1:85; Photo, 40-2:168; Report, 40-2:152.

Twenty-Fourth: Announcement, 41-2:162, 42-1:83; Photo, 42-2:176; Report, 42-2:163.

Twenty-Fifth: Announcement, 43-2:170, 44-1:77; Photo, 44-2:186; Report, 44-2:170, 45-1:97.

Twenty-Sixth: Announcement, 45-2:181; Photo, 46-2:177; Report, 46-2:159.

Twenty-Seventh: Announcement, 47-2:60, 48-1:87; Photo, 49-1:76; Report, 49-1:62.

Twenty-Eighth: Announcement, 49-2:65.